AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An air cleaning device with a photocatalyst, comprising:

a body ~~(1)~~;

a ~~first~~ filter unit ~~(4)~~;

a photocatalyst reaction unit which can generate a spiral air current;

a forcible convection unit ~~(3)~~; and

a circuit control unit ~~(5)~~ which can adjustably control ~~the~~ operation of the forcible convection unit ~~(3)~~, wherein ~~:~~

the ~~first~~ filter unit ~~(4)~~ is disposed below the body ~~(1)~~ and has a front surface ~~in shape of~~ with an opening ~~so as to communicate~~ communicating with the outside and a rear surface in communication with the forcible convection unit ~~(3), and~~

the forcible convection unit ~~(3)~~ is disposed between the ~~first~~ filter unit ~~(4)~~ and the photocatalyst reaction unit ~~so as to communicate~~ so the ~~first~~ filter unit ~~(4)~~ communicates with the photocatalyst reaction unit, ~~characterized in that:~~

the photocatalyst reaction unit includes an air duct ~~(21)~~, a photocatalyst coating layer ~~(22)~~ disposed on an interior wall of the air duct ~~(21)~~, two lamp holders ~~(24)~~, at least one ultra violet ray tube ~~(23)~~ mounted on the two lamp holders ~~(24)~~, and a blow guide holder ~~(26)~~ on which a spiral blow guide blade ~~(25)~~ is mounted,

~~wherein two~~ ends of the air duct ~~(21)~~ are hermetically connected to left and right side plates of the body ~~(1)~~, respectively,

the air duct ~~is provided~~ includes, at a left side ~~thereof with~~, an air inlet port ~~which is~~ in communication with ~~the~~ air outlet port of the forcible convection unit ~~(3)~~, in a tangential direction thereof, at a right side thereof, and with an air outlet port in a tangential direction thereof ~~;~~,

~~two~~ ends of each ultra violet ray tube ~~(23)~~ are mounted on the lamp holders ~~(24)~~ and axially disposed inside the air duct ~~(21)~~, respectively;

the blow guide holder ~~(26)~~ is ~~provided~~ located on the left side plate and located at a position of the air inlet port of the air duct ~~(21);~~, and

one of the two lamp holders ~~(24)~~ is connected to the right side plate of the body ~~(1)~~, and the other ~~one~~ lamp holder is connected to the blow guide holder ~~(26)~~.

2. (Currently Amended) The air cleaning device with a photocatalyst according to claim 1, ~~characterized in that:~~ wherein the air duct ~~(21) is composed of~~ includes two elongated housings, each housing having a semi-circle section, which can be abutted with each other, wherein each of the two semi-circle shaped housings ~~is provided~~ includes, at a lower left side ~~thereof with~~, a recess so that ~~two~~ the recesses of the two ~~housing~~ housings can be abutted with each other so as to form ~~an~~ the air inlet port.

3. (Currently Amended) The air cleaning device with a photocatalyst according to claim 1 ~~or 2, characterized in that:~~ wherein

the interior wall of the air duct ~~(21) is formed into an accidented~~ includes a surface with undulations, and

the photocatalyst coating layer ~~(22) is coated onto~~ coats the ~~accidented~~ surface with undulations of the interior wall of the air duct ~~by a spraying or impregnating process~~.

4. (Currently Amended) The air cleaning device with a photocatalyst according to claim 1 ~~or 2, characterized in that:~~ wherein

the ~~first~~ filter unit ~~(4)~~ includes a dust blocking web ~~(42)~~ and a movable door ~~(41) which are provided~~ on a front housing ~~(11)~~ of the body ~~(1), wherein:~~

the dust blocking web ~~(42)~~ is a filter web made of active carbon or high-efficiency HEPA filtering materials or a combination thereof~~;~~, and

the movable door ~~(41)~~ is disposed on a front side of the dust blocking web ~~(42)~~ and ~~provided with~~ includes an air suction grill.

5. (Currently Amended) The air cleaning device with a photocatalyst according to claim 1 ~~or 2, characterized in that:~~ wherein

the forcible convection unit ~~(3) is configured to be~~ includes a blower ~~consisting of~~ having

a motor ~~(31) which is provided~~ located between a front housing and a rear housing of the body ~~(1)~~ and connected to the circuit control unit ~~(5)~~, and a plurality of blades ~~(32) which are~~ mounted on a ~~rotation~~ rotating shaft of the motor ~~(31), wherein:~~ and

an air inlet port of the blower is in communication with the ~~first~~ filter unit ~~(4)~~ and an air outlet port ~~thereof~~ of the filter unit is in communication with an air inlet port of the photocatalyst reaction unit.